



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-----------------------------|----------------------|------------------|
| 10/683,580 | 10/10/2003 | John Allen Broadbent | 275.7715USU | 7719 |
| 7590 Paul D. Greeley, Esq. Ohlandt, Greeley, Ruggiero & Perle, L.L.P. 10th Floor One Landmark Square Stamford, CT 06901-2682 | | EXAMINER JIANG, CHEN WEN | | |
| | | ART UNIT | PAPER NUMBER 3744 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 03/14/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/683,580 | BROADBENT ET AL. | |
| | Examiner | Art Unit | |
| | Chen-Wen Jiang | 3744 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 October 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-34 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 33 and 34 is/are allowed.

6) Claim(s) 1-7, 10, 11, 15-23, 26, 27, 31 and 32 is/are rejected.

7) Claim(s) 8, 9, 12-14, 24, 25 and 28-30 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 10 October 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>20040126, 20040402, 20051223</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,4,5,10,11,15,16,17,20,21,26,27,31 and 32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Torimitsu (U.S. Patent Number 5,586,446).

In regard to claims 1,4,5,10,15,16,17,20,21,26,27,31 and 32, Torimitsu discloses a monitoring system for remotely monitoring ice-making machine. Referring to Figs.1 and 4, the system comprises ice making machine 10A-1, receiver 10A, detection device 12 for detecting operating condition, setting device 13 and a monitoring system. The system determines the ice-making machine as being operated in an abnormal condition if the control data of the ice-making machine identified by the identity data ID becomes abnormal. The detection device 12 includes a float switch 114 arranged to detect an amount of water in the water tank 101, an ice sensor 116 arranged within an ice storage bin 115 to detect an amount of ice stored therein and a temperature sensor 117 arranged to detect a temperature at an outlet side of evaporator coil 107. In the occurrence of abnormality, the alarm device 33 is activated to inform the operator of the ice-making machine identified by the identity data ID.

In regard to claims 11 and 27, hot gas valve and bin switch are well known in the art of ice making machine.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 2,3,7,18,19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torimitsu (U.S. Patent Number 5,586,446) in view of Sharood et al. (U.S. Patent Number 6,453,687).

Torimitsu discloses the invention substantially as claimed. However, Torimitsu does not disclose transmitting the data to a service provider. Sharood et al. disclose the abnormal condition can be transmitted to a user, monitoring facility or service provider in the same field of endeavor for the purpose of servicing the system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Torimitsu with transmitting data to a service provider in view of Sharood et al. so as to examine and repair the system.

5. Claims 6 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torimitsu (U.S. Patent Number 5,586,446) in view of Baker (WO 02/065031).

Torimitsu discloses the invention substantially as claimed. However, Torimitsu does not disclose data including cycle time or cycle count. Baker discloses the data including run time, operating parameters last operating mode, cycle time and failure code in the same field of endeavor for the purpose monitoring conditions. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Torimitsu with data including cycle time or cycle count in view of Baker so as to monitor the conditions.

Allowable Subject Matter

6. Claims 33 and 34 are allowed.

7. Claims 8,9,12-14,24,25 and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809.

The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chen-Wen Jiang
Primary Examiner

A handwritten signature in black ink, appearing to read "CJ".